

AN 128:254083 CA Full-text

OREF 128:50223a,50226a

TI Insect control agents containing surfactants

IN Ohashi, Michiko

PA Aramuya K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 10087408	A	19980407	JP 1996-272798	19960909 <--
PRAI	JP 1996-272798		19960909		

AB Title agents are mixts. of surfactants (soaps, etc.) with lye ("aku"), K₂CO₃, or NaHCO₃. Various insects including Abraxas, which has extremely low cuticular permeability, could be controlled by spraying with a mixture of an aqueous soap solution (0.1-0.2 weight%) with 10-20 weight% of lye (supernatant of a a 1:1 ash-H₂O mixture) or 0.1-0.2 weight% of NaHCO₃.

AN 1998-266959 [199824] WPIDS Full-text
 DNC C1998-083085 [199824]
 TI Pest control agent - comprising surfactant (such as soap) and lye
 DC C07
 IN OHASHI M
 PA (ARAM-N) ARAMUYA KK
 CYC 1
 PI JP 10087408 A 19980407 (199824)* JA 3[0] <--
 ADT JP 10087408 A JP 1996-272798 19960909
 PRAI JP 1996-272798 19960909
 IPCR A01N0025-30 [I,A]; A01N0025-30 [I,C]; A01N0059-00 [I,A]; A01N0059-00 [I,C]
 FCL A01N0025-30; A01N0059-00 Z
 FTRM 4H011; 4H011/AC01; 4H011/AC02; 4H011/AC03; 4H011/AE01; 4H011/BA05;
 4H011/BB18; 4H011/BB20; 4H011/BC06; 4H011/DA13; 4H011/DC05; 4H011/DE15;
 4H011/DF04; 4H011/DG05; 4H011/DG15
 AB JP 10087408 A UPAB: 20050521
 A pest controlling agent, comprises a surfactant (such as soap) and lye. The pest
 controlling agent can also be made of a surfactant (such as soap) and 1) potassium
 carbonate or 2) sodium hydrogen carbonate.
 USE - The pest controlling agent is useful for insanitary insects, agricultural
 pests and unpleasant and noxious insects such as Papilionidae, Pieris rapae,
 urticating moth, Chilo, Sitotroga, Sitophilus zeamais, house fly, Lucilia, Culex
 pipiens, stegomyia mosquito, Nephrotettix, Periplaneta japonica, aphid, scale insect,
 slug, and termites.
 ADVANTAGE - The pest controlling agent is safe to humans and environment, inexpensive,
 has low phytotoxicity and can be applied to a wider range of insect pests. The agent
 can be easily and simply used as well.
 FS CPI
 MC CPI: C05-A01B; C05-C04; C10-C04E; C14-B03A; C14-B04B3; C14-B04B7; C14-B12

INSECT REST CONTROLLING AGENT

Publication number: JP10087408 (A)

Publication date: 1998-04-07

Inventor(s): OHASHI MICHIKO +

Applicant(s): ARAMUYA KK +

Classification:

- **international:** **A01N25/30; A01N59/00; A01N25/30; A01N59/00;** (IPC1-7): A01N25/30; A01N59/00

- **European:**

Application number: JP19960272798 19960909

Priority number(s): JP19960272798 19960909

Abstract of JP 10087408 (A)

PROBLEM TO BE SOLVED: To obtain a raw material of controlling agent for insect pests used insect harmful to hygiene, insects harmful to agriculture and uncomfortable insects from inexpensive substances which are usually used for processing treatment of foods and recognized to be safe and to produce low toxicity to human beings and circumstances, low cost, low damage from medicines, extension of scope applying to insect pests and convenience in using. **SOLUTION:** By using a mixture of an inexpensive surfactant (soap and the like) and lye (or potassium carbonate and sodium hydrogencarbonate), which are usually used for processing treatment of foods and recognized to be safe, as a controlling agent for pest used for medically important insects, agriculturally important insects and uncomfortable insects, it makes low toxicity for human beings and circumstances, low cost, low damage from medicines, extension of scope applying to pests and convenience in using possible.

Data supplied from the **espacenet** database — Worldwide

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-087408

(43)Date of publication of application : 07.04.1998

(51)Int.Cl.

A01N 25/30

A01N 59/00

(21)Application number : 08-272798

(71)Applicant : ARAMUYA:KK

(22)Date of filing : 09.09.1996

(72)Inventor : OHASHI MICHIKO

(54) INSECT REST CONTROLLING AGENT

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a raw material of controlling agent for insect pests used insect harmful to hygiene, insets harmful to agriculture and uncomfortable insects from inexpensive substances which are usually used for processing treatment of foods and recognized to be safe and to produce low toxicity to human beings and circumstances, low cost, low damage from medicines, extension of scope applying to insect pests and convenience in using.

SOLUTION: By using a mixture of an inexpensive surfactant (soap and the like) and lye (or potassium carbonate and sodium hydrogencarbonate), which are usually used for processing treatment of foods and recognized to be safe, as a controlling agent for pest used for medically important insects, agriculturally important insects and uncomfortable insects, it makes low toxicity for human beings and circumstances, low cost, low damage from medicines, extension of scope applying to pests and convenience in using possible.

Machine translation JP10087408

(19)**Publication country**Japan Patent Office (JP)
(12)**Kind of official gazette**A publication of patent applications (A)
(11)**Publication No.**JP,10-87408,A
(43)**Date of Publication**Heisei 10(1998) (1998) April 7
(54)**Title of the Invention**Insect pest control agent
(51)**International Patent Classification (6th Edition)**

A01N 25/30

59/00

FI

A01N 25/30

59/00 Z

Request for ExaminationUnrequested

The number of claims 3

Mode of ApplicationDocument

Number of Pages3

(21)**Application number**Japanese Patent Application No. 8-272798

(22)**Filing date**Heisei 8(1996) (1996) September 9

(71)**Applicant**

Identification Number596148674

Nameoh incorporated company -- **

Address1-7-8, Minami-Tokiwadai, Itabashi-ku, Tokyo

(72)**Inventor(s)**

NameMichiko Ohashi

Address1-7-8, Minami-Tokiwadai, Itabashi-ku, Tokyo

Abstract:

PROBLEM TO BE SOLVED: To obtain a raw material of controlling agent for insect pests used insect harmful to hygiene, insets harmful to agriculture and uncomfortable insects from inexpensive substances which are usually used for processing treatment of foods and recognized to be safe and to produce low toxicity to human beings and circumstances, low cost, low damage from medicines, extension of scope applying to insect pests and convenience in using. **SOLUTION:** By using a mixture of an inexpensive surfactant (soap and the like) and lye (or potassium carbonate and sodium hydrogencarbonate), which are usually used for processing treatment of foods and recognized to be safe, as a controlling agent for pest used for medically important insects, agriculturally important insects and uncomfortable insects, it makes low toxicity for human beings and circumstances, low cost, low damage from medicines, extension of scope applying to pests and convenience in using possible.

JPO Machine translation abstract:

(57) **Abstract**

SUBJECT The raw material of the insect pest control agent used to a medically important insect, an agricultural noxious insect, and unpleasant vermin is used for food-processing processing from the former, and it is recognized as safe. An inexpensive substance is asked and the simplicity of the low toxicity to people and environment, a low price, a low medical harm, range expansion of an application noxious insect, and use is brought about.

Means for Solutionan insect pest control agent used to a medically important insect, an agricultural noxious insect, and unpleasant vermin -- surface-active agents (soap etc.) and bitter taste It is used for food-processing processing from the former, and is recognized as safe. (or potassium carbonate.) Inexpensive Or thing to consider as a mixture with sodium bicarbonate Simplicity of low toxicity to people and environment, a low price, a low medical harm, range expansion of an application noxious insect, and use is made possible.

Claim(s)

Claim 1 Surface-active agents (soap etc.) An insect pest control agent which is a mixture with bitter taste.

Claim 2 Surface-active agents (soap etc.) An insect pest control agent which is a mixture with potassium carbonate.

Claim 3 Surface-active agents (soap etc.) An insect pest control agent which is a mixture with sodium bicarbonate.

Detailed Description of the Invention

0001

Industrial Application It is related with the insect pest control agent which mixed the surface-active agent, the bitter taste, potassium carbonate, or sodium bicarbonate which is used for processing of foodstuffs from the former, and is recognized to be safe.

0002

Description of the Prior Art For the biological control of the noxious insect in a farm, a golf course, a garden, the interior of a room, etc., with an organic matter (the antibiotic, the pyrethrin), a synthetic organic matter (chlorinated hydrocarbon, Cava mate), an inorganic substance (copper sulfate, mercury chloride), etc. of the natural origin. The enzyme of an insect is checked, or an insecticide with the compound which prevents normal work of an excitement-of-nerve film, and reveals poisoning is a center, and the insect pest control agent etc. which operate insect physiology with a sex pheromone and a juvenile hormone active substance have been developed. Domestic small-scale horticulture is encouraged in removing an aphid and a scale insect with a hand or a brush.

0003

Problem to be solved by the invention The production and consumption of an insecticide which are used to a medically important insect, an agricultural noxious insect, and unpleasant vermin increase at an extraordinary speed, and attention is called to the insecticide resistance of the toxicity to the person accompanying it, an environmental hazard, and an insect. The cautions to toxicity to which these are carried out in special agriculture although fruits, vegetables, a herb, etc. are liked and made from the home gardening which has prospered and protector wear at the time of a chemical spray There is a place where the severe drugs expiration date of fixed time is hard to be protected before harvest. The physiologic control by a sex pheromone, a juvenile hormone active substance, etc. which are not likely to have toxicity is not a technique still easy about the range of a price, technology, and an application insect. The range of the toxicity to people and environment, a price, a medical harm, and an application noxious insect and the simplicity of use are asked for an improvement. It is to at any time as a raw material raw material of the insecticide which can be sprinkled. It is considered as the inexpensive substance recognized to be safe from the former. The safety of people and environment is improved. A scope is extended from on the mechanism of action. It is expected that there is little resistance.

0004

Means for solving problem An insect pest control agent. Potassium carbonate which is the main ingredients of A surface-active agents (soap etc.), B bitter taste (it opens), or bitter taste which are used for processing of foodstuffs from the former, and are originally recognized to be safe harmless, and which are substance material Or by considering it as a mixture with the sodium bicarbonate used as the substitute of bitter taste from ancient times. The problem is solved.

0005

Mode for carrying out the invention 1 skin permeability to the insect skin, 2 adhesion spreading nature, and 3. drug effect potentiation are expected from A surface-active agents (soap etc.), A thing as for which B bitter taste (it opens) exists and for which it is and electrolyte balance outside the 1. insect inside of the body is lost, and a dehydrating action of 2. insect object are expected, and potassium carbonate or sodium bicarbonate uses this mixture of two ingredients as an insect pest control agent. It sprays, or sprinkles and uses so that solution may be enough poured on a noxious insect body surface.

0006

Working example Although the skin permeability of an insect differs greatly in each, Many are the soapy water solutions as an A surface-active agent. It is 10% to 20%, or B sodium bicarbonate from 0.1% of weight concentration to 0.2% about B bitter taste (a volume ratio wood ash one : supernatant fluid obtained from the water 2). Weight concentration A thing mixed 0.2% from 0.1% with a spray pump. It sprayed and an effect was seen promptly. It restricted to a large-sized larva of remarkable low EDASHAKU of skin permeability, and a slug imago, and a soapy water solution took 0.4% of mixing for B sodium bicarbonate A0.4%. A mixed solution is enough sprayed on a noxious insect.

Effect of the Invention When the above-mentioned mixed liquor was sprayed on the following noxious insect, the effect was observed in each. Although a glow local **the medical harm to vegetation** to the leaf of an oyster and the sprout of a kumquat and light was accepted, it did not accept to the sprout and other kinds of the non-mature fruit Chinese citron of an oyster, Rosaceae, Brassicaceae, Compositae, and Liliaceae at all. Bordeaux mixture is expected to confirm a priori the vegetation which is contraindication by local trial. It dried gradually and caterpillar, the scale insect, and the slug became small in several days. although mosquito flies fall and it becomes impossible to move -- the inside of flies -- resistance -- it is strong, and although there were some which wipe the body about well and are recovered, it is possible to carry out an assist at the time of crash. As for Grylloidea, saltation becomes impossible and it is comparatively promptly effective. If an ant is sprinkled the hit which it becomes impossible to move and has a nest, it will abandon a nest, and if it sprinkles at the root of a rose of Sharon, a pomegranate, and a mandarin orange, an aphid and a black soot disease will also be prevented.

AGEHA Larva cabbage butterfly Larva tussock moth . Larva Chilo Imago Angoumois grain moth Imago Japanese beetle . Imago rice weevil Imago clo Aulacophora femoralis Imago YOMOGIHAMUSHI . Imago ground beetle Imago muscid Imago Kyn Valle . Imago red house mosquito Imago stegomyia mosquito Imago TOBIIROKEARI . Imago Larva Nest blacktip reef shark OYOKOBAI Imago Larva winter cherry bug Imago Larva HIMEKUMOHERIKAMEMUSHI Imago Larva KANETATAKI Imago OKAME cricket Imago Periplaneta japonica Imago Larva aphid Imago scale insect Imago slug Imago termite Imago Larva

Industrial Application It is related with the insect pest control agent which mixed the surface-active agent, the bitter taste, potassium carbonate, or sodium bicarbonate which is used for processing processing of foodstuffs from the former, and is recognized to be safe.

Description of the Prior Art For the biological control of the noxious insect in a farm, a golf course, a garden, the interior of a room, etc., with an organic matter (the antibiotic, the pyrethrin), a synthetic organic matter (chlorinated hydrocarbon, Cava mate), an inorganic substance (copper sulfate, mercury chloride), etc. of the natural origin. The enzyme of an insect is checked, or an insecticide with the compound which prevents normal work of an excitement-of-nerve film, and reveals poisoning is a center, and the insect pest control agent etc. which operate insect physiology with a sex pheromone and a juvenile hormone active substance have been developed. Domestic small-scale horticulture is encouraged in removing an aphid and a scale insect with a hand or a brush.

Effect of the Invention When the above-mentioned mixed liquor was sprayed on the following noxious insect, the effect was observed in each. Although a glow local **the medical harm to vegetation** to the leaf of an oyster and the sprout of a kumquat and light was accepted, it did not accept to the sprout and other kinds of the non-mature fruit Chinese citron of an oyster, Rosaceae, Brassicaceae, Compositae, and Liliaceae at all. Bordeaux mixture is expected to confirm a priori the vegetation which is contraindication by local trial. It dried gradually and caterpillar, the scale insect, and the slug became small in several days. although mosquito flies fall and it becomes impossible to move -- the inside of flies -- resistance -- it is strong, and although there were some which wipe the body about well and are recovered, it is possible to carry out an assist at the time of crash. As for Grylloidea, saltation becomes impossible and it is comparatively promptly effective. If an ant is sprinkled the hit which it becomes impossible to

move and has a nest, it will abandon a nest, and if it sprinkles at the root of a rose of Sharon, a pomegranate, and a mandarin orange, an aphid and a black soot disease will also be prevented.

AGEHA Larva cabbage butterfly Larva tussock moth . Larva Chilo Imago Angoumois grain moth Imago Japanese beetle . Imago rice weevil Imago clo Aulacophora femoralis Imago YOMOGIHAMUSHI . Imago ground beetle Imago muscid Imago Kyn Valle . Imago red house mosquito Imago stegomyia mosquito Imago TOBIIROKEARI . Imago Larva Nest blacktip reef shark OYOKOBAI Imago Larva winter cherry bug Imago Larva HIMEKUMOHERIKAMEMUSHI Imago Larva KANETATAKI Imago OKAME cricket Imago Periplaneta japonica Imago Larva aphid Imago scale insect Imago slug Imago termite Imago Larva

Working example Although the skin permeability of an insect differs greatly in each, Many are the soapy water solutions as an A surface-active agent. It is 10% to 20%, or B sodium bicarbonate from 0.1% of weight concentration to 0.2% about B bitter taste (volume ratio wood ash one : supernatant fluid obtained from the water 2). Weight concentration The thing mixed 0.2% from 0.1% with a spray pump. It sprayed and the effect was seen promptly. It restricted to the large-sized larva of remarkable low EDASHAKU of skin permeability, and the slug imago, and the soapy water solution took 0.4% of mixing for B sodium bicarbonate A0.4%. A mixed solution is enough sprayed on a noxious insect.

Problem to be solved by the invention The production and consumption of an insecticide which are used to a medically important insect, an agricultural noxious insect, and unpleasant vermin increase at an extraordinary speed, and attention is called to the insecticide resistance of the toxicity to the person accompanying it, an environmental hazard, and an insect. The cautions to toxicity to which these are carried out in special agriculture although fruits, vegetables, a herb, etc. are liked and made from the home gardening which has prospered and protector wear at the time of a chemical spray There is a place where the severe drugs expiration date of fixed time is hard to be protected before harvest. The physiologic control by a sex pheromone, a juvenile hormone active substance, etc. which are not likely to have toxicity is not a technique still easy about the range of a price, technology, and an application insect. The range of the toxicity to people and environment, a price, a medical harm, and an application noxious insect and the simplicity of use are asked for an improvement. It is to at any time as a raw material raw material of the insecticide which can be sprinkled. It is considered as the inexpensive substance recognized to be safe from the former. The safety of people and environment is improved. A scope is extended from on the mechanism of action. It is expected that there is little resistance.

Means for solving problem An insect pest control agent. Potassium carbonate which is the main ingredients of A surface-active agents (soap etc.), B bitter taste, or bitter taste which are used for processing processing of foodstuffs from the former, and are originally recognized to be safe harmless, and which are substance material Or by considering it as a mixture with the sodium bicarbonate used as the substitute of bitter taste from ancient times. The problem is solved.

0005

Mode for carrying out the invention 1 skin permeability to the insect skin, 2 adhesion spreading nature, and 3. drug effect potentiation are expected from A surface-active agents (soap etc.), The thing as for which B bitter taste (it opens) exists and for which it is and the electrolyte balance outside the 1. insect inside of the body is lost, and the dehydrating action of 2. insect object are expected, and potassium carbonate or sodium bicarbonate uses this mixture of two ingredients as an insect pest control agent. It sprays, or sprinkles and uses so that solution may be enough poured on a noxious insect body surface.
